

=> d 11

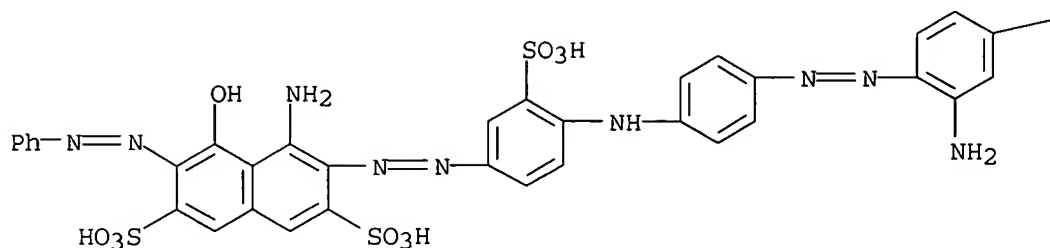
L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
RN 12731-63-4 REGISTRY
CN C.I. Reactive Black 31 (9CI) (CA INDEX NAME)
OTHER NAMES:
CN Duasyn Black KRL-SF
CN Duasyn Black RL-SF-VP 228
CN **Reactive Black 31**
CN Remazol Black RL
CN Remazol Black RL-ID
MF Unspecified
CI MAN
LC STN Files: CA, CAPLUS, CHEMLIST, TOXCENTER, USPAT2, USPATFULL
DT.CA Caplus document type: Journal; Patent
RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); USES (Uses)
RLD.NP Roles for non-specific derivatives from non-patents: PROC (Process); PRP (Properties); USES (Uses)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

42 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
42 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 12

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
RN 85631-88-5 REGISTRY
CN 2,7-Naphthalenedisulfonic acid, 4-amino-3-[[4-[[4-[(2-amino-4-hydroxyphenyl)azo]phenyl]amino]-3-sulfohenyl]azo]-5-hydroxy-6-(phenylazo)-, trisodium salt (9CI) (CA INDEX NAME)
OTHER NAMES:
CN C.I. 30410
CN C.I. Direct Black 168
CN Coriacide Black SB
CN **Direct Black 168**
CN Direct Black H 8F-SF-VP132
CN Direct Black HEF-SF
CN Duasyn Direct Black HEF-SF
DR 83046-38-2
MF C34 H27 N9 O11 S3 . 3 Na
SR European Union (EU)
LC STN Files: CA, CAPLUS, CHEMCATS, CHEMLIST, TOXCENTER, USPAT2, USPATFULL
Other Sources: EINECS**, NDSL**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA Caplus document type: Journal; Patent
RL.P Roles from patents: PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); USES (Uses)
CRN (72066-88-7)



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125 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 125 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 13

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN

RN 5610-64-0 REGISTRY

CN C.I. Acid Black 52 (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 1-Naphthalenesulfonic acid, 3-hydroxy-4-[(2-hydroxy-1-naphthalenyl)azo]-7-nitro-, chromium complex (9CI)

CN C.I. Acid Black 52, sodium salt (8CI)

CN Chromium, 3-hydroxy-4-[(2-hydroxy-1-naphthalenyl)azo]-7-nitro-1-naphthalenesulfonic acid complex (9CI)

OTHER NAMES:

CN **Acid black 52**

CN Acid Black M

CN Acid Black MSh

CN Aizen Opal Black WGH

CN Aizen Opal Black WH

CN Aluminum Black V

CN Amasol Black WA

CN Aminyl Black F-GL

CN Black 7EMBL

CN Black EMB

CN Bucolan Black WA Extra

CN C.I. 15711

CN C.I. Mordant Black 1 chromium complex

CN Calcofast Leather Black WA

CN Calcofast Wool Black WA

CN Chromacyl Black W

CN Chrome Intra Black WA

CN Chromolan Black NWA

CN Chromolan Black WA

CN Efdolan Black WAN

CN Eriolan Black WAL

CN Fenapal Black WA

CN Gycolan Black WAL

CN Gycolan Black WG

CN Inochrome Black BNI Extra

CN Inoderme Grey B
 CN Lanyl Black GW
 CN Metallized Black WANA
 CN Neolan Black ALU
 CN Neolan Black J
 CN Neolan Black WA
 CN Neolan Black WA 140
 CN Neolan Black WA Extra N
 CN Neutral Grey 3BLS
 CN Nylosine Acid Black P-R
 CN Palatin Fast Black WAN
 CN Palatine Black WAN Extra
 CN Palatine Black WANA
 CN Palatine Fast Black WAN Extra
 CN Printing Black for Silk BW
 CN Stenamina Black B
 CN Sumilan Black WA
 CN Tertroxane Black WAN
 CN Vana Acid Black
 CN Vitrolan Black WA
 CN Vitrolan Black WA Extra N
 CN Yamada Neo Fast Black WA
 DEF This substance is identified in the COLOUR INDEX by Colour Index
 Constitution Number, C.I. 15711.
 DR 12392-58-4, 10279-69-3, 34464-60-3
 MF Unspecified
 CI COM, MAN
 LC STN Files: AQUIRE, CA, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM, HSDB*,
 MSDS-OHS, NIOSHTIC, PROMT, TOXCENTER, USPATFULL
 (*File contains numerically searchable property data)
 Other Sources: DSL**, EINECS**, TSCA**
 (**Enter CHEMLIST File for up-to-date regulatory information)
 DT.CA Caplus document type: Conference; Journal; Patent; Report
 RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);
 PROC (Process); PRP (Properties); USES (Uses); NORL (No role in record)
 RLD.P Roles for non-specific derivatives from patents: USES (Uses)
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
 study); OCCU (Occurrence); PROC (Process); PRP (Properties); RACT
 (Reactant or reagent); USES (Uses); NORL (No role in record)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

116 REFERENCES IN FILE CA (1907 TO DATE)
 3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 116 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 15

L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 6473-13-8 REGISTRY
 CN 2-Naphthalenesulfonic acid, 6-[(2,4-diaminophenyl)azo]-3-[[4-[[4-[[7-[(2,4-diaminophenyl)azo]-1-hydroxy-3-sulfo-2-naphthalenyl]azo]phenyl]amino]-3-sulfophenyl]azo]-4-hydroxy-, trisodium salt (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 2-Naphthalenesulfonic acid, 6-[(2,4-diaminophenyl)azo]-3-[[4-[p-[[7-[(2,4-diaminophenyl)azo]-1-hydroxy-3-sulfo-2-naphthyl]azo]anilino]-3-sulfophenyl]azo]-4-hydroxy-, trisodium salt (8CI)
 OTHER NAMES:
 CN Aizen Primula Black ACH
 CN Amanil Fast Black FOR
 CN Artificial Silk Black CA
 CN Atlantic Formaldehyde Black GR
 CN Bali Black A

CN Belaform Black G
 CN Benzanil Fast Black 2G
 CN Benzo Black A 250
 CN Benzonerol A
 CN Benzonerol AFA extra
 CN Benzonerol Black VS
 CN Benzonerol VS
 CN Benzonerol VSF
 CN C.I. 35435
 CN C.I. Direct Black 22
 CN Calcoform Black RN
 CN Carbide Fast Black G
 CN Carbide Fast Black GA
 CN Chlorazol Black GF
 CN Chlorazol Black GFP
 CN Chrome Leather Black GA
 CN Cotton Black MA
 CN Cuprofix Black NF
 CN Dialuminous Black A
 CN Diazol Fast Black J
 CN Diazol Fast Black JN
 CN Diphenyl Black FG
 CN Direct Artificial Silk Black CA
 CN **Direct Black 22**
 CN Direct Black CA
 CN Direct Black NBR
 CN Direct Fast Black B
 CN Direct Fast Black B 160
 CN Direct Fast Black C
 CN Direct Fast Black G
 CN Direct Fast Black NS
 CN Dyrect Black GR
 CN Enianerol CA
 CN Erie Fast Black G
 CN Fenamin Black VA
 CN Formal Fast Black B
 CN Formal Fast Black G
 CN Formal Fast Black GG
 CN Formaldehyde Fast Black 2G
 CN Formaldehyde Fast Black G
 CN Formaldehyde Fast Black GA
 CN Formalide Black GR
 CN Hispamin Fast Dischargeable Black CA
 CN Interchem Formaldehyde Black GDW

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for
 DISPLAY

MF C44 H35 N13 O11 S3 . 3 Na

LC STN Files: BIOBUSINESS, BIOSIS, CA, CAPLUS, CHEMCATS, CHEMLIST, CIN,
 CSCHM, IFICDB, IFIPAT, IFIUDB, PROMT, SPECINFO, TOXCENTER, USPATFULL
 Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

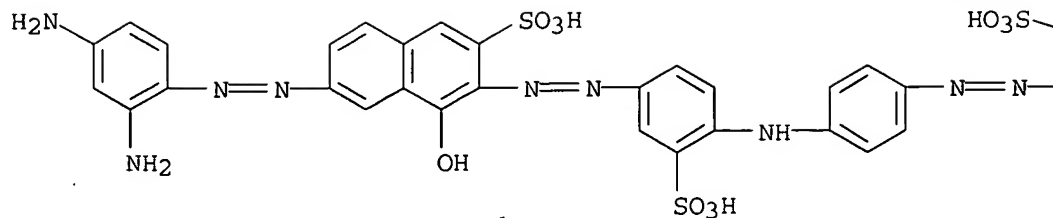
DT.CA Caplus document type: Journal; Patent

RL.P Roles from patents: ANST (Analytical study); PREP (Preparation); PROC
 (Process); USES (Uses)

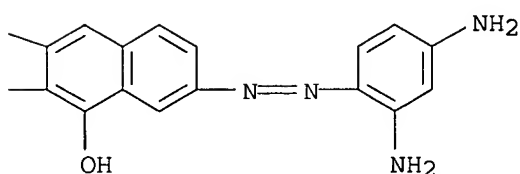
RLD.P Roles for non-specific derivatives from patents: PREP (Preparation);
 USES (Uses)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological
 study); MSC (Miscellaneous); OCCU (Occurrence); PROC (Process); PRP
 (Properties); USES (Uses)

CRN (76186-07-7)



● 3 Na



105 REFERENCES IN FILE CA (1907 TO DATE)

3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

106 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 16

L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN

RN 6428-31-5 REGISTRY

CN 2,7-Naphthalenedisulfonic acid, 4-amino-3,6-bis[[4-[(2,4-diaminophenyl)azo]phenyl]azo]-5-hydroxy-, disodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN C.I. Direct Black 19, disodium salt (8CI)

OTHER NAMES:

CN Artificial Silk Black G

CN Artificial Silk Black GN

CN Artificial Silk Black GR

CN Atlantic Artificial Silk Black G

CN Bali Viscose Black G

CN Bali Viscose Black N

CN Bencidal Fast Black G

CN Benzanil Fast Black G

CN Benzo Fast Black G

CN Benzoform Black RRA-CF

CN C.I. 35255

CN C.I. Direct Black 19

CN Chlorazol Viscose Black B

CN Chrome Leather Black GNA

CN Cibafix Direct Black 19

CN Columbia Fast Black G

CN Columbia Fast Black GB

CN Coranil Direct Black B

CN Cutamin Black CG

CN Daiwa Black 320H

CN Diamine Fast Black B

CN Diaphtamine Fast Black KG

CN Direct Artificial Silk Black G

CN Direct Black 19
 CN Direct Black L 3BG
 CN Direct Fast Black G
 CN Direct Fast Black GU
 CN Direct Fast Black SA
 CN Direct Lightfast Black G
 CN Direct Rayon Black KSG
 CN Fenamin Black GR
 CN Formal Fast Black 2B
 CN Hispamin Fast Black CG
 CN Indoblack GR
 CN Kayarus Black G
 CN Kayarus Black G Conc.
 CN Orient P 200
 CN Orient Water Black 100L
 CN Orient Water Black 108L
 CN Orient Water Black 200L
 CN Phenamine Viscose Black RR
 CN Pyrazol Fast Black GS
 CN Rayon Black G
 CN Rayon Black GSN
 CN Rayon Black M
 CN Rayon Fast Black B
 CN Solar Black G
 CN Sumilight Black G
 CN Tetrodirect Black V

ADDITIONAL NAMES NOT AVAILABLE IN THIS FORMAT - Use FCN, FIDE, or ALL for DISPLAY

DR 431058-20-7, 135151-56-3, 69073-20-7, 73944-27-1, 76450-44-7

MF C34 H29 N13 O7 S2 . 2 Na

CI COM

LC STN Files: CA, CAPLUS, CHEMCATS, CHEMLIST, CIN, CSCHEM, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, NIOSHTIC, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

DT.CA Caplus document type: Conference; Journal; Patent

RL.P Roles from patents: BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

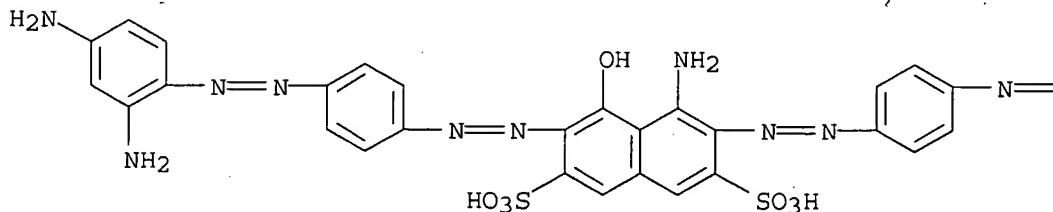
RLD.P Roles for non-specific derivatives from patents: USES (Uses)

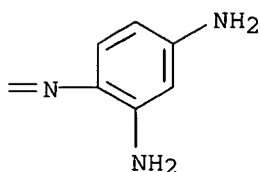
RL.NP Roles from non-patents: BIOL (Biological study); OCCU (Occurrence); PROC (Process); PRP (Properties); USES (Uses)

RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study); PREP (Preparation)

CRN (7518-68-5)

PAGE 1-A





282 REFERENCES IN FILE CA (1907 TO DATE)
 5 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 282 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 17

L7 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
 RN 12225-26-2 REGISTRY
 CN C.I. Reactive Black 8 (9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN 2,7-Naphthalenedisulfonic acid, 5-[(4-amino-6-chloro-1,3,5-triazin-2-yl)amino]-4-hydroxy-3-[(2-hydroxy-5-nitrophenyl)azo]-, chromium cobalt complex (9CI)
 CN Chromium, 5-[(4-amino-6-chloro-1,3,5-triazin-2-yl)amino]-4-hydroxy-3-[(2-hydroxy-5-nitrophenyl)azo]-2,7-naphthalenedisulfonic acid complex (9CI)
 CN Cobalt, 5-[(4-amino-6-chloro-1,3,5-triazin-2-yl)amino]-4-hydroxy-3-[(2-hydroxy-5-nitrophenyl)azo]-2,7-naphthalenedisulfonic acid complex (9CI)
 OTHER NAMES:
 CN Basilen Black P-BR
 CN C.I. 18207
 CN Cibacron Black B-D
 CN Drimarene Black P-BL
 CN Helaktyn Black DN
 CN Kayacion Black P-N
 CN Kayacion Black P-N Liquid 40
 CN Ostazin Black H-N
 CN Procion Black H-N
 CN Procion Black P-N
 CN **Reactive Black 8**
 CN Reactive Black K-BR
 CN Reactive Black MN
 DR 122178-50-1, 131595-00-1, 75026-76-5
 MF Unspecified
 CI MAN
 LC STN Files: AGRICOLA, ANABSTR, BIOSIS, CA, CAPLUS, CHEMLIST, CSCHEM, RTECS*, TOXCENTER, USPAT2, USPATFULL
 (*File contains numerically searchable property data)
 DT.CA Caplus document type: Conference; Journal; Patent
 RL.P Roles from patents: BIOL (Biological study); PRP (Properties); USES (Uses)
 RLD.P Roles for non-specific derivatives from patents: PREP (Preparation); USES (Uses)
 RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)
 RLD.NP Roles for non-specific derivatives from non-patents: PREP (Preparation)
 *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
 72 REFERENCES IN FILE CA (1907 TO DATE)
 3 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 72 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 19

L9 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN

RN 2118-39-0 REGISTRY

CN 2,7-Naphthalenedisulfonic acid, 6-amino-4-hydroxy-3-[[7-sulfo-4-[(4-sulfophenyl)azo]-1-naphthalenyl]azo]-, tetrasodium salt (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2,7-Naphthalenedisulfonic acid, 6-amino-4-hydroxy-3-[[7-sulfo-4-[(p-sulfophenyl)azo]-1-naphthyl]azo]-, tetrasodium salt (7CI)

CN C.I. Food Black 2, tetrasodium salt (8CI)

OTHER NAMES:

CN Black 7984

CN Black No. 2

CN C Black 7

CN C.I. 27755

CN C.I. Food Black 2

CN E 152

CN E 152 (dye)

CN **Food Black 2**

DR 166889-67-4

MF C26 H19 N5 O13 S4 . 4 Na

CI COM

LC STN Files: CA, CAOLD, CAPLUS, CHEMLIST, CIN, NIOSHTIC, PIRA, SPECINFO, TOXCENTER, USPAT2, USPATFULL

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

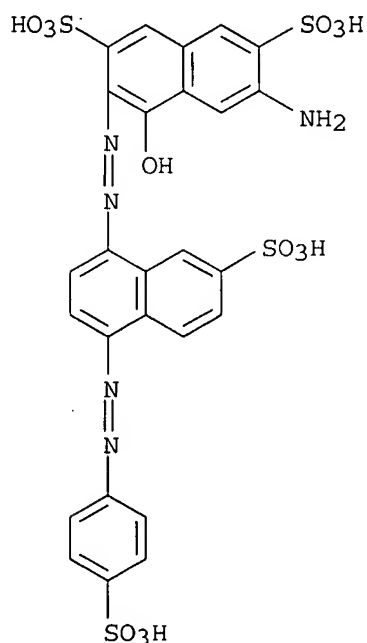
DT.CA Caplus document type: Journal; Patent

RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

RLD.P Roles for non-specific derivatives from patents: USES (Uses)

RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)

CRN (25738-38-9)



270 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
271 REFERENCES IN FILE CAPLUS (1907 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

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(FILE 'HOME' ENTERED AT 13:57:54 ON 18 JAN 2005)

FILE 'REGISTRY' ENTERED AT 13:58:25 ON 18 JAN 2005

L1	1 S REACTIVE BLACK 31/CN
L2	1 S DIRECT BLACK 168/CN
L3	1 S ACID BLACK 52/CN
L4	0 S DIRECT BLACK 170/CN
L5	1 S DIRECT BLACK 22/CN
L6	1 S DIRECT BLACK 19/CN
L7	1 S REACTIVE BLACK 8/CN
L8	0 S SOLVENT BLACK 13/CN
L9	1 S FOOD BLACK 2/CN

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Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	("6489382").PN.	US-PGPUB; USPAT	OR	OFF	2005/01/18 13:15
L2	2	((("5507865") or ("5116409")).PN.	US-PGPUB; USPAT	OR	OFF	2005/01/18 13:16
L3	4	("4632703" "5242489" "5245159" "5279652").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2005/01/18 13:16
L4	2	("5507865").URPN.	USPAT	OR	ON	2005/01/18 13:17
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L6	0	(ink with jet) and (black same (dye or pigment)) and ((amino adj acid) or alanine or arginine or aspartic or cysteine or cystine or glutamic or glutamine or glycine) and betaine	DERWENT	OR	ON	2005/01/18 13:21
L7	0	(ink with jet) and (black same (dye or pigment)) and ((amino adj acid) or alanine or arginine or aspartic or cysteine or cystine or glutamic or glutamine or glycine) and (amine adj oxide)	DERWENT	OR	ON	2005/01/18 13:21
L8	0	(ink with jet) and (black same (dye or pigment)) and ((amino adj acid) or alanine or arginine or aspartic or cysteine or cystine or glutamic or glutamine or glycine) and lecithin	DERWENT	OR	ON	2005/01/18 13:20
L9	207	(ink with jet) and (black same (dye or pigment)) and ((amino adj acid) or alanine or arginine or aspartic or cysteine or cystine or glutamic or glutamine or glycine) and betaine	US-PGPUB; USPAT	OR	ON	2005/01/18 13:21
L10	73	(ink with jet) and (black same (dye or pigment)) and ((amino adj acid) or alanine or arginine or aspartic or cysteine or cystine or glutamic or glutamine or glycine) and (amine adj oxide)	US-PGPUB; USPAT	OR	ON	2005/01/18 13:21

S1	201	(ink with jet) and (black same (dye or pigment)) and ((amino adj acid) or alanine or arginine or aspartic or cysteine or cystine or glutamic or glutamine or glycine) and (amphoteric with surfactant)	US-PGPUB; USPAT	OR	ON	2005/01/18 13:18
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